

WHAT IS CLAIMED IS:

1. A control program for a computer in a video-on-demand system, which is embodied in a program storage device that is readable by said computer and which directs said computer to perform the steps of:

5 transfer a group of video data packets, from a complete video in a first memory into a second memory for said computer;

build, in said second memory, a respective subgroup of internet protocol headers for each video data packet in said group; and,

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construct, in said second memory, a transmission control list which indicates how each video data packet in said group and its respective subgroup of internet protocol headers, can be accessed from said

15 second memory by another computer.

2. A control program according to claim 1 wherein said build step includes the substep of — generating multiple variables, for each respective subgroup of internet protocol headers, that change with each
5 subgroup.

3. A control program according to claim 1 wherein said build step includes the substep of — generating a variable for each respective subgroup of internet protocol headers, that changes as a function of each
5 video data packet.

4. A control program according to claim 1 wherein said construct step includes the substep of — providing in said list, a respective pointer and a respective byte count and a respective set of flags for each video data
5 packet in said group and for each subgroup of internet protocol headers.

5. A control program according to claim 1 wherein said construct step includes the substep of — providing in said list, just one pointer for every video data packet in said group, and just one other pointer for
5 every subgroup of internet protocol headers, and a respective set of flags for each video data packet in said group and for each subgroup of internet protocol headers.

6. A control program according to claim 1 which also directs said computer to perform the steps of -a) receive a series of requests from an external computer, and b) repeat, in response to each of said requests, said transfer step and said build step and said construct step.

7. A control program according to claim 1 wherein each subgroup of internet protocol headers that is built by said build step includes at least two separately identifiable headers.

8. A control program according to claim 1 wherein said transfer step transfers from forty to four hundred video data packets in each group.

9. A control program according to claim 1 wherein said program storage device is an optical storage media.

10. A control program according to claim 1 wherein said program storage device is a magnetic storage media.

11. A control program according to claim 1 wherein said program storage device is an integrated circuit.